

REMARKS/ ARGUMENTS

Claims 22 to 42 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 20 to 28, 30 to 33 and 38 to 42 were rejected under 35 U.S.C. 102(b) as being anticipated by Etchell et al. (U.S. Patent 4,313,378). Claim 29 was rejected as being unpatentable over Etchell et al. in view of Bass et al. (U.S. Patent 3,146,709). Claim 34 was rejected as being unpatentable over Etchell et al. in view of Albright (U.S. Patent 3,791,295). Claims 35 to 37 were rejected as being unpatentable over Etchell et al. in view of Fermi (U.S. Patent 4,191,106). Claim 39 was rejected as being unpatentable over Etchell et al. in view of Barnes (U.S. 3,108,538).

Claims 21 to 24, 29, 30, 33 to 37, 39 and 41 have been amended to more particularly and distinctly claim the invention. New claims 43 to 45 have been added. Support for new claims 43 to 45 is found at paragraphs [0034], [0035] and [0037], for example.

Reconsideration of the application based on the following remarks is respectfully requested.

Rejections under 35 U.S.C. 112, second paragraph

Claims 22 to 42 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 22 has been amended to more particularly and distinctly claim the invention and is now submitted as being clear and definite. Claim 28 has been canceled.

Withdrawal of the rejection under 35 U.S.C. 112, second paragraph, of claim 22 and its dependent claims is respectfully requested.

Rejections under 35 U.S.C. 102(b)

Claims 20 to 28, 30 to 33, 38 and 40 to 42 were rejected under 35 U.S.C. 102(b) as being anticipated by Etchell et al. (U.S. Patent 4,313,378).

Etchell et al. discloses a "no-lock" printing plate assembly including a plate cylinder having a smooth plate-supporting surface interrupted by an axial groove defining leading and trailing edges, at least the leading edge having a flat undercut end face with a register pin anchored therein. (abstract). The plate is formed of a thin sheet of resilient material having a

smooth undersurface and which is bent over adjacent its ends to define leading and trailing edge portions having respective longitudinal notches, the bend adjacent the leading edge making an acute angle and the bend adjacent the trailing edge making a wide obtuse angle. (Abstract).

Claim 22 recites “[a] printing cylinder apparatus comprising:

a cylinder including at least one tensioning element;

a sleeve-like cover for the cylinder including material and walls that define a gap running parallel to an axis of rotation of the cover and at least one recess in an inner circumferential surface of the cover, the at least one tensioning element being engageable in the at least one recess in order to produce a tangential tension of the sleeve-like cover when the cover is fitted to the cylinder, the at least one tensioning element being adapted such that the tangential tension elastically deforms the cover when the cover is fitted to the cylinder, thereby narrowing the gap; and

at least one retaining force element, edges of a printing form being fixable in the slit gap via the at least one retaining force element;

the cover being adapted to hold a plate-like printing form;

the at least one tensioning element being adapted to engage the at least one recess and produce a tension in a circumferential direction of the sleeve-like cover sufficient to cause the walls of the sleeve-like cover to contact each other when the cover is fitted to the cylinder.”

It is respectfully submitted that Etchell et al. does not disclose “the at least one tensioning element being adapted to engage the at least one recess and produce a tension in a circumferential direction of the sleeve-like cover sufficient to cause the walls of the sleeve-like cover to contact each other when the cover is fitted to the cylinder” as recited in claim 22.

Hooks 54 disclosed in Etchell et al. are not adapted such that hooks 54 can produce a tension in a circumferential direction on saddles 51, 52 when saddles are fitted on cylinder 10 that is sufficient to cause ends of saddles 51, 52 to contact one another. The configuration of hooks and pockets 55 shown in Fig. 1 of Etchell et al. is such that only a small component of the force generated by hooks 54 is directed in the circumferential direction. Due to the steep inclination of surfaces of hooks 54 and surfaces of pockets 55, the frictional force exerted between surfaces of hooks 54 and surfaces of pockets 55 is greater than any circumferential force exerted by hooks 54. The specification of Etchell et al. also does not indicate that hooks 55 can produce such a tension in a circumferential direction as required by claim 22.

Also, because the size of G of axial groove 20 needs to be substantially larger than twice

the thickness of the plate, and particularly larger than five times the thickness of the plate, there would be no reason why hooks 55 would be able to produce the tension in the circumferential direction required by claim 22. (Col. 3, Lines 50 to 55; Col. 4, Lines 4 to 8). Thus, because Etchell et al. does not disclose the "at least one tensioning element" of claim 22, Etchell et al. cannot disclose each and every element of claim 22.

Withdrawal of the rejection to claim 22 and its dependent claims under 35 U.S.C. 102(b) is respectfully requested.

Rejections under 35 U.S.C. 103(a)

Claim 29 was rejected as being unpatentable over Etchell et al. in view of Bass et al. (U.S. Patent 3,146,709).

Etchell et al. is described above.

Bass et al. discloses an apparatus for mounting cylindrical sleeve A on a mandrel B.

Claim 29 depends from claim 22. Because mandrel B of Bass et al. does not include any "tensioning element" adapted to engage at least one recess and produce a tension in a circumferential direction of cylindrical sleeve A, Bass et al. cannot cure the deficiency of Etchell et al. with respect to claim 22. Thus, no combination of these references teaches all the limitations of claim 29 and withdrawal of the rejection under 35 U.S.C. 103(a) of claim 29 is respectfully requested.

Claim 34 was rejected as being unpatentable over Etchell et al. in view of Albright (U.S. Patent 3,791,295).

Etchell et al. is described above.

Albright discloses a semi-cylindrical adapter shell or "saddle," around which is bent a thin arcuate metal or plastic printing plate, and bolted in pairs to the cylinders of newspaper printing presses to replace the now obsolescent stereotypes, has transversely spaced pins on its opposite ends projecting through holes in the inwardly bent ends or flaps of the printing plate. (Abstract).

Claim 34 depends from claim 22. Because printing press cylinder 14 of Albright does not include any "tensioning element" adapted to engage at least one recess and produce a tension in a circumferential direction of saddle 18 of Albright, Albright cannot cure the deficiency of Etchell et al. with respect to claim 22. Thus, no combination of these references teaches all the

limitations of claim 34 and withdrawal of the rejection under 35 U.S.C. 103(a) of claim 34 is respectfully requested.

Claims 35 to 37 were rejected as being unpatentable over Etchell et al. in view of Fermi (U.S. Patent 4,191,106).

Etchell et al. is described above.

Fermi et al. discloses a printing plate clamping assembly. A trailing edge 9 of a printing plate 6 is clamped by edge portions 10 of lock bar 11 of the clamping assembly 3. (Col. 7, Lines 37 to 39). To accommodate registration an alignment of a leading edge 7 of a printing plate 6, registration and retaining spring clips 25 are provided. (Col. 9, Lines 1 to 3). Each spring clip 25 also includes protruding bulge portions 28, 28', for aligning engagement with an opening or openings 29 on the leading edge 7 of the flexible printing plate 6. (Col. 9, Lines 7 to 11). When raised or bulge portion 28 is aligningly engaged in opening 29 of the flexible printing plate 6, the oppositely arranged bulge portion 28' is engaged against the smooth planar surface 30' of the respective opposite edge portion 8' of the shim member 2. (Col. 9, Lines 11 to 16).

Claims 35 to 37 depend from claim 22. Because printing press cylinder 1 of Fermi et al. does not include any "tensioning element" adapted to engage at least one recess and produce a tension in a circumferential direction shim member 2, Fermi et al. cannot cure the deficiency of Etchell et al. with respect to claim 22. Thus, no combination of these references teaches all the limitations of claims 35 to 37 and withdrawal of the rejection under 35 U.S.C. 103(a) of claims 35 to 37 is respectfully requested.

Claim 39 was rejected as being unpatentable over Etchell et al. in view of Barnes (U.S. 3,108,538).

Etchell et al. is described above.

Barnes et al. discloses a flexible-printing-plate securing arrangement. Screws 33, 34 and bar assembly 30 are used to secure two printing plates P on associated dummy plates 16a on a plate cylinder 26. (Col. 2, line 65 to Col. 3, line 14).

Claim 39 depends from claim 22. Because plate cylinder 26 of Barnes et al. does not include any "tensioning element" adapted to engage at least one recess and produce a tension in a circumferential direction dummy plates 16a, Fermi et al. cannot cure the deficiency of Etchell et al. with respect to claim 22. Thus, no combination of these references teaches all the limitations

of claim 39 and withdrawal of the rejection under 35 U.S.C. 103(a) of claim 39 is respectfully requested.

New Claims 43 and 44

It is respectfully submitted that new claims 43 and 44 are patentable in view of the cited references. With respect to claim 43, for example, none of the references or any obvious combination thereof teaches or discloses the limitation of claim 43 of the “plate-like printing element having bent-over edges that are fixed in the gap by the walls of sleeve-like cover and tangential tensioning of the cover by the at least one tensioning element.” With respect to claim 44, for example, none of the references or any obvious combination thereof teaches or discloses the limitation of claim 44 of the “at least one tensioning element being adapted to produce a tension in a circumferential direction of the cover sufficient to cause the walls of the sleeve-like cover to contact each other.”


Allowance of claims 43 and 44 is respectfully requested.

CONCLUSION

The present application is respectfully submitted as being in condition for allowance and applicants respectfully request such action.

Respectfully submitted,

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